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MONTANA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL SCIENCES

Monthly Activities Report
of the Air Quality Bureau

July, 1980

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1. Highlights:

The Board of Health adopted the proposed ambient air quality standards that have been the subject of public hearings and participation for the last two years.

Mike Roach, the Bureau Chief for the past five years, submitted his resignation. July 3 was his last day.

Jon Bolstad, the Engineering Supervisor and a Bureau employee for the past nine years, submitted his resignation. His last day was July 25.

JoAnn Vorozilchak, an engineer and Bureau employee for two years, resigned to attend Graduate School at Penn State. Her last day will be August 22.

2. Ambient Air Quality Network:

a. Standards Exceeded - see attached Air Quality Data Summary.

c. Laboratory Status:

Total Determinations for month	2206
Total samples for month	264

3. Permits and Tax Credits:

a. Construction Permits applied for

Konitz Construction, Silver Bow County, crusher
Jim Kraus Contractor, Fergus County, asphalt plant and crusher
Montana Highway Dept., Flathead County, hot plant
McIntyre Construction, Fergus & Judity Basin Co., crusher
Peter Kiewit Sons, Flathead County, crusher and asphalt plant
Halliburton Services, Glendive, bulk cement handling facility
Meyer Construction, Sweet Grass County, hot plant

Permits Approved

Meyer Construction, Granite County, crusher and asphalt plant
Rehbein Contracting, Mineral County, crusher and asphalt plant
McIntyre Construction, Teton County, crusher and hot plant
Jim Kraus Contractor, Fergus County, hot plant and crusher
McIntyre Construction, Fergus, Judith Basin and Wheatland Counties, crushers

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4. Variance Status:

a. Current

ASARCO, rule 16-2.14(1)-S1470(2), Sulfur Oxide emissions applicable to lead-zinc complex, final compliance was June 30, 1980. ASARCO has submitted an application for renewal of variance. No hearing date has been set.

Anaconda Company variance from sulfur dioxide emissions, final compliance was June 30, 1980. Renewal application has been received; no hearing date has been set.

5. Enforcement Actions:

None in July

6. Tepee Burner and Open Burning

Number of burners in operation: 30

Open Burning Permits Issued:

Kalispell Office	126	Sanders County	47
Cascade County	10	Yellowstone County	24
Lake County	21	Rest of State	331
Missoula County	10	Total	569

7. Source Tests Performed:

None in July

8. Field Investigations:

Champion Building Products, Darby, EIS update
Stoltze-Conner, Darby, EIS update
Clark Brothers, Victor, inspection
Stoltze Land & Lumber, Dillon, EIS update, Citation issued
Helena Sewage Treatment Plant, Helena, investigation

9. Complaints

Sewage Treatment Plant, Helena, odor, (5 complaints)
Fairgrounds Trailer Park, Helena, raw sewage dumped on ground, referred to County Sanitarian
Glacier Cheese Factory, Gallatin Gateway, odor, Livestock Dept. to investigate
Exxon, Billings, Odor, referred to Regional Engineer
Cenex, Laurel, black smoke, referred to Regional Engineer
Phillips, Great Falls, odor, investigated

10. Data Processing Services:

    a. Ambient Data Summary attached

    b. Emission Inventory Status - program is being updated with current information

11. Environmental Impact Statements:

    None presently being written by the Bureau. None have been received for comment.

12. Status of Studies, Contracts and Reports

    MAPS is in the last year of its study; final reports are being written.

    Flathead Study is progressing; a new monitoring person has been hired for this year.

    Poplar River Project is proceeding with a new person taking over the monitoring this year.

13. Schools and Training:

    "Chemical Methods of Quantitative Source Apportionment", Oregon Graduate Center, Beaverton, Oregon. This was a two-day course involving the use of chemical mass balance equations.

    Quality Assurance Workshop was presented by the Air Quality Bureau.

14. Public Hearings and Meetings:

    Board of Health met on July 11.

    Meetings attended:

    Ambient Monitoring Seminar in Denver presented by EPA and Rockwell.
    National Wildfire Committee, Missoula
    Meeting in Great Falls concerning 2,4,D study.
    Smoke Management Meeting, Missoula
    Co-Incineration Consultant Selection Committee, Helena, regarding Sewage Treatment Plant.

15. Other:

    Anaconda Copper operations in Butte, Anaconda and Great Falls, were shut down the entire month due to a union strike.

    ASARCO acid plant shut down on July 26 for catalyst replacement and other repairs.

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

Monthly Summary of Air Quality Data

JAN.-JUNE, 1980

Pollutant: Total Suspended Particulate Units: micrograms/cu. meter

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
140	Morton-Decker Bldg Horn Co.						
	Jan.	46	46	134	36	1	
	Feb.	38	46	134	33.5	2	
	March	35	46	134	32	3	
	April	139	139	139	41	4	
	May *	70	139	139	42	5	
	June	51	139	139	41.5	6	
	Lockwood School Billings						
	Jan	28	28	353	28	1	
	Feb.	47	47	353	27.5	2	
	March	32	47	353	28	3	
	April	112	112	353	37	4	
	May*	110	112	353	45	5	
	June			**			
	KHGL Billings						
	Jan.	72	72	130	46	1	
	Feb.	51	72	130	41	2	
	March	85	85	130	40	3	
	April	128	128	130	44.5	4	
	May*	49	128	130	44.5	5	
	June	84	128	130	45.6	6	
	City Hall-Billings						
	Jan.	134	134	288	59	1	
	Feb.	116	134	288	65	2	
	March	166	166	166	72	3	1 exc. Fed. Sec Std.
	April	124	166	166	76	4	
	May	107	166	166	79	5	
	June	85	166	166	77	6	

*NOTE - May TSP readings do not include volcanic ash episode of May 18-23, 1980

Pollutant: TSP Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
140	Grand Ave. School Billings						
	Jan.	136	136	302	63	1	
	Feb.	154	154	302	76.5	2	1 exc. FSS
	March	214	214	214	88	3	2 Exc. FSS
	April	122	214	214	87	4	
	May*	68	214	214	82.5	5	
	June	72	214	214	79	6	
	Central Park-Bllgs						
	Jan.	158	158	266	57	1	1 Exc. FSS
	Feb.	93	158	266	54.5	2	
	March	143	158	266	58	3	
	April	215	215	266	69.5	4	5 exc. FSS
	May *	145	215	266	77	5	
	June			**			
	Jr.High-Laurel						
	Jan.	76	76	90	35	1	
	Feb.	130	130	130	43.5	2	
	Mar	82	130	130	47	3	
	April	120	130	130	55	4	
	May*	70	130	130	55	5	
	June	195	195	195	59	6	1 exc. FSS
141	Hospital Roof Great Falls						
	Jan.	48.5	48.5	145.2	30.1	1	
	Feb.	46.5	48.5	108.3	31.7	2	
	March	28.7	48.5	108.3	27.8	3	
	April	73.5	73.5	108.3	30.6	4	
	May *	65.6	73.5	108.3	32.6	5	
	June	75.7	75.7	89.6	33.7	6	

Pollutant: TSP Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
141	Fire Sta. #1 Great Falls						
	Jan.	106.0	106.0	188.7	72.2	1	
	Feb.	141.3	141.3	188.7	70.1	2	
	March	180.7	180.7	180.7	72.8	3	1 exc Fed Sec Std.
	April	95.8	180.7	180.7	72.2	4	
	May*	99.1	180.7	180.7	71.5	5	
	June	173.8	180.7	180.7	75.3	6	
	Kiwanis Park Great Falls						
	Jan.	53	53	111	33	1	
	Feb.	67	67	111	32.5	2	
	March	51	67	105	33	3	
	April	59	67	105	35	4	
	May *	75	75	105	38	5	
	June	72	75	105	38	6	
142	Lincoln School Anaconda						
	Jan.	108	108	303	49	1	
	Feb.	145	145	303	62.5	2	
	March	84	145	202	62	3	
	April	165	165	202	68	4	2 exc Fed Sec Std.
	May *	67	165	202	63	5	
	June			**			
	Floral Park Butte						
	Jan	138	138	138	108	1	
	Feb.	166	166	166	94.5	2	1 exc Fed Sec Std
	Mar	103	166	166	86	3	
	Apr	137	166	166	87	4	
	May*	89	166	166	75	75	
	June			**			

**Data not available at time of report

FSS - Federal secondary standard 150 ug/m^3

FPS - Federal Primary Standard 260 ug/m^3

Pollutant: TSP Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
142	Dr.Canty Res. Butte - Jan.	322	322	322	131	1	2 Exc. FSS
	Feb.	192	322	322	116.5	2	3 Exc. FSS
	March	111	322	322	97	3	3 Exc. FSS
	April	160	322	322	96.5	4	1 Exc. FSS
	May*	107	322	322	88	5	
	June	51	322	322	80	6	
	Greeley School Butte-Jan.	220	220	242	157	1	3 Exc.FSS
	Feb.	49	220	242	97.5	2	
	March	109	220	242	91	3	
	April	103	220	242	89	4	
	May*	55	220	242	80	5	
	June	64	220	242	76	6	
	Hebgen Park-Butte						
	Jan.	252	252	306	110	1	6 Exc. FSS
	Feb.	224	252	306	105.5	2	4 Exc. FSS
	March	167	252	306	97	3	1 Exc. FSS
	April	198	252	306	100	4	4 Exc. FSS
	May*	113	252	306	93	5	
	June	50	252	306	86	6	
	Tierney Res. Silver Bow Co.						
	Jan.	59	59	84	42	1	
	Feb.	67	67	84	43	2	
	March	21	67	84	34	3	
	April	90	90	90	37	4	
	May*	35	90	90	36	5	
	June	36	90	90	34	6	

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

MONTHLY SUMMARY OF AIR QUALITY DATA

JAN. - JUNE 1980

Pollutant: TSP Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
142	Traphagen Hall						
	Bozeman-Jan.	44	44	106	37	1	
	Feb.	47	47	106	34	2	
	March	33	47	106	31	3	
	April	117	117	117	39	4	
	May	115	117	117	41	5	
	June	43	117	117	39	6	
	Cogswell Bldg.						
	Helena-Jan.	199	199	211	116	1	1 Exc FSS
	Feb.	126	199	211	95.5	2	
	March	69	199	199	84	3	
	April	115	199	199	82.5	4	
	May*	163	199	199	77	5	
	June	68	199	199	70	6	
	212 E. Pacific						
	E.Helena-Jan.	119	119	182	95	1	
	Feb.	131	131	182	99	2	
	March	76	131	182	90	3	
	April	108	131	182	88.5	4	
	May*	346	346	346	104	5	1 Exc. FPS
	June	117	346	346	100	6	
	A&W, E. Helena						
	Jan.	108	108	108	78	1	
	Feb.	116	116	116	77.5	2	
	March	63	116	116	72		
	April	67	116	116	70		
	May *	43	116	116	65		
	June	67	116	116	62		
143	Lindsay-Dawson Co.						
	Jan.	24	24	208	14	1	
	Feb.	19	24	208	12	2	
	March	48	48	208	18	3	
	April	85	85	208	25	4	
	May*	114	114	208	35	5	
	June	152	152	208	42	6	
	Border -Scobey						
	Daniels Co.-Jan.	23	23	68	13	1	
	Feb.	34	34	68	13.5	2	
	Mar	16	34	68	12	3	
	April	24	34	68	12.5	4	
	May*	115	115	115	23	5	
	June	26	115	115	23	6	
144	Anders-Col.Falls						
	Jan.	188	188	484	83	1	1 Exc, FSS
	Feb.	81	188	484	65.5	2	
	March	140	188	484	80	3	
	april	225	225	484	94.5	4	1 FSS;1FPS
	May	122	225	484	90	5	
	June	125	225	484	89.6	6	
	NAAC - Col. Falls						
	Jan.	35	35	64	24	1	
	Feb.	43	43	64	22	2	
	March	21	43	64	20	3	
	April	28	43	64	20	4	
	May*	45	45	64	21	5	
	June	53	53	64	22	6	
	Airport-Flathead Co.						
	Jan.	45	45	140	36	1	
	Feb.	67	67	140	37	2	
	March	33	67	140	32	3	
	April	88	88	140	36.5	4	
	May *	46	88	140	37	5	
	June	232	232	232	46.5	6	1 Exc. FSS

Pollutant: TSP Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
144	Universal Athl.						
	Kalispell-Jan.	137	137	137	92	1	
	Feb.	126	137	137	82	2	
	March	197	197	197	111	3	1Exc. FSS
	April	192	197	197	112	4	1 Exc. FSS
	May*	138	197	197	114	5	
	June	95	197	197	108	6	
	Big Fork-Flathead						
	Jan.	102	102	112	60	1	
	Feb.	88	102	112	50	2	
	March	35	102	112	42	3	
	April	67	102	112	41	4	
	May*	32	102	112	38	5	
	June	44	102	112	37	6	
	Polson-Lake Co.						
	Jan.	177	177	202	98	1	1 Exc. FSS
	Feb.	62	177	202	69	2	
	March	37	177	202	55	3	
	April	114	177	202	60	4	
	May*	519	519	519	78	5	1 Exc. FSS
	June	51	519	519	73	6	
	Ronan-Lake Co.						
	Jan.	140	140	406	61	1	1 Exc. FSS
	Feb.	168	168	406	75	2	
	March	106	168	406	79	3	
	April	220	220	406	96	4	4 Exc. FSS
	May*	80	220	406	88	5	
	June						

Pollutant: TSP Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Champion#1-Msla						
	Jan.	144.6	144.6	149.8	56.4	1	
	Feb.	213.3	213.3	213.3	63.0	2	1 Exc. FSS
	March	60.5	213.3	213.3	49.8	3	
	April		**				
	May*	83.0	213.3	213.3	45.7	4	
	June		**				
	Champion#2-Msla						
	Jan.	117.2	117.2	139.6	44.2	1	
	Feb.	137.6	137.6	139.6	48.6	2	
	March	53.5	137.6	139.6	38.4	3	
	April		**				
	May*	68.1	137.6	139.6	36.7	4	
	June		**				
	Courthouse Roof						
	Msla-Jan.	214.1	214.1	267.0	95.5	1	3 exc. FSS
	Feb.	357.8	357.8	357.8	120.3	2	7 Exc. FSS
	March	140.5	357.8	357.8	109.9	3	2 Exc. FPS
	April		**				
	May*	163.2	357.8	357.8	100.4	4	1 Exc. FSS
	Lions Park-Msla						
	Jan.	320.7	320.7	419.4	134.7	1	4 Exc. FSS;5 FPS
	Feb.	502.6	502.6	502.6	168.2	2	5 Exc. FSS 8 FPS
	March	300.5	502.6	502.6	147.0	3	4 Exc. FSS 1 FPS
	April		**				
	May*	120.9	502.6	502.6	127.3	4	
	June		**				

Pollutant: TSP Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to Date	No. of Mons. of Data	Comments
144	McLeod Park						
	Msla-Jan.	225.7	225.7	322.7	128.1	1	5 Exc. FSS
	Feb.	406.9	406.9	406.9	147.2	2	3 Exc. FSS; 1 FPS
	March	329.8	406.9	406.9	138.7	3	1 FSS; 1 FPS
	April	236.6	406.9	406.9	127.6	4	1 Exc. FSS
	May*	110.1	406.9	406.9	112.0	5	
	June	117.8	406.9	406.9	107.1	6	
	Rose Park-Msla						
	Jan.	234.3	234.3	317.3	134.1	1	5 Exc. FSS
	Feb.	382.6	382.6	382.6	148.4	2	3 Exc. FSS; 1 FPS
	March	248.3	382.6	382.6	133.9	3	2 Exc. FSS
	April	----------	**	----------	----------	----	
	May*	96.8	382.6	382.6	115.1	4	
	June	106.4	382.6	382.6	104.2	5	
	Schilling Street						
	Msla - Jan.	240.7	240.7	240.7	119.7	1	2 Exc. FSS
	Feb.	464.5	464.5	464.5	158.1	2	1 Exc. FSS; 2 FPS
	March	247.2	464.5	464.5	143.6	3	1 Exc. FSS
	April	168.2	464.5	464.5	133.8	4	3 Exc. FSS
	May*	110.6	464.5	464.5	120.1	5	
	June	----------	**	----------	----------	----	

Pollutant: Respirable Particulate-Ofchot Sampl Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
140	Central Park						
	Billings-Jan.						
	Fine	31.2	31.2		18.0	1	
	Coarse	68.8	68.8		17.0		
	Feb.-Fine	24.8	31.2		14.9	2	
	Coarse	29.4	68.8		14.7		
	Mar.-Fine	24.4	31.2		18.0	3	
	Coarse	33.5	68.8		21.0		
	Apr.-Fine	19.4	31.2		16.9	4	
	Coarse	53.3	68.8		25.6		
	May-Fine	12.6	31.2		15.5	5	
	Coarse	38.5	68.8		27.0		
141	Kiwanis Park-G.Falls						
	Jan. -Fine	25.6	25.6		11.0	1	
	Coarse	32.8	32.8		14.2		
	Feb. - Fine	24.1	25.6		11.6	2	
	Coarse	14.8	32.8		9.9		
142	Floral Park FS						
	Butte-Jan.						
	Fine	8.6	8.6		8.6	1	
	Coarse	23.5	23.5		23.5		
	Feb.-Fine	47.8	47.8		18.4	2	
	Coarse	48.9	48.9		20.4		
	Mar.-Fine	22.0	47.8		17.0	3	
	Coarse	21.9	48.9		17.6		
	April-Fine	21.7	47.8		15.7	4	
	Coarse	74.1	74.1		19.8		

Pollutant: Respirable Particulate-Ofchot Units ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to Date	No. of Mons. of Data	Comments
142	Lincoln School						
	Anaconda						
	Jan.-Fine	37.8	37.8		22.9	1	
	Coarse	44.2	44.2		10.6		
	Feb.-Fine	33.4	37.8		21.0	2	
	Coarse	47.8	47.8		16.1		
	Mar.-Fine	16.5	37.8		17.1	3	
	Coarse	123.6	123.6		20.6		
	April-Fine	21.8	37.8		15.5	4	
	Coarse	55.2	123.6		21.9		
	May - Fine	17.0	37.8		14.1	5	
	Coarse	22.9	123.6		19.9		
	Hebgen Park-Butte						
	Jan.-Fine	69.5	69.5		38.2	1	
	Coarse	102.1	102.1		37.2		
	Feb.-Fine	57.3	69.5		32.3	2	
	Coarse	51.5	102.1		31.8		
	March-Fine	50.8	69.5		28.4	3	
	Coarse	39.5	102.1		29.5		
	April-Fine	44.1	69.5		26.5	4	
	Coarse	84.5	102.1		33.3		
	May - Fine	41.4	69.5		25.3	5	
	Coarse	15.9	102.1		29.2		
143	Scobey-Border						
	Daniels Co.						
	Jan. - Fine	5.6	5.6		4.6	1	
	Coarse	22.9	22.9		13.9		
	Feb. - Fine	6.0	6.0		4.6	2	
	Coarse	29.3	29.3		13.0		
	March-Fine	4.3	6.0		4.2	3	
	Coarse	11.8	29.3		11.8		

Pollutant: Respirable Particulate-Ofchot Units: ug/m^3

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
144	Airport-Flathead						
	Jan.-Fine	28.3	28.3		22.0	1	
	Coarse	29.4	29.4		15.5		
	Feb.-Fine	37.9	37.9		22.9	2	
	Coarse	12.1	29.4		10.8		
	March-Fine	10.8	37.9		17.6	3	
	Coarse	39.3	39.3		12.2		
	April-Fine	13.7	37.9		16.6	4	
	Coarse	27.0	39.3		15.9		
	May - Fine	13.8	37.9		16.0	5	
	Coarse	45.1	45.1		17.8		
	June-Fine	11.2	37.9		15.0	6	
	Coarse	28.0	45.1		18.2		
	Courthouse-Msla						
	Jan. - Fine	41.1	41.1		30.6	1	
	Coarse	43.7	43.7		18.2		
	Apr. - Fine	20.0	41.1		23.5	2	
	Coarse	156.0	156.0		32.7		
	May - Fine	89.2	89.2		23.6	3	
	Coarse	131.7	156.0		34.6		
	Lions Park-Msla						
	Jan. - Fine	99.2	99.2		60.5	1	
	Coarse	14.6	94.6		33.6		
	Feb. - Fine	49.7	99.2		46.0	2	
	Coarse	92.0	94.6		40.9		
	March - Fine	51.8	99.2		38.0	3	
	Coarse	136.3	136.3		46.9		
	April - Fine	24.5	99.2		31.6	4	
	Coarse	79.5	136.3		44.7		
	May- Fine	23.5	99.2		28.0	5	
	Coarse	135.4	136.3		45.0		

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

Monthly Summary of Air Quality Data

JAN. - JUNE 1980

Pollutant: Miscellaneous Continuous Data Units: ppm

AQCR	Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Carbon Monoxide						
141	GF Federal-EC. Falls						
	May	2.64	2.64	2.64	0.56	1	
	June	2.54	2.64	2.64	0.52	2	
144	Malf. Jct. SE						
	Missoula - Jan.	11.5	11.5	15.3	3.4	1	
	Feb.	13.0	13.0	15.3	3.7	2	
	March	8.5	13.0	15.3	3.4	3	
	April	6.8	13.0	15.3	3.1	4	
	Lions Park-Msla						
	Jan.	11.5	11.5	18.8	2.5	1	
	Feb.	13.2	13.2	13.2	2.6	2	
	March	3.5	13.2	13.2	2.0	3	
	April	7.0	13.2	13.2	2.2	4	
	Nitrogen Oioxide						
140	CentralPark-Blgs						
	Jan.	.064	.064	.147	.018	1	
	Feb.	.087	.087	.147	.018	2	
	March	.031	.087	.147	.015	3	
	April	.048	.087	.147	.014	4	
	May	.038	.087	.147	.013	5	
141	Kiwanis Park						
	Great Falls-Jan.	.035	.035	.059	.008	1	
	Feb.	.049	.049	.059	.010	2	
	March	.040	.049	.059	.010	3	
	Sulfur Dioxide						
140	Lockwood School						
	Blgs - Jan.	0.435	0.435	.435	0.025	1	
	Feb.	.175	.435	.435	0.020	2	
	March	.241	.435	.435	.018	3	
	April	.234	.435	.435	.017	4	
	May	.106	.435	.435	.017	5	
	June	.155	.435	.435	.022	6	

Pollutant: Misc. Continuous Units: PPM

AQCR	Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Nitrogen Oioxide						
142	Hebgen Park						
	Butte - Jan.	.125	.125	.187	.026	1	
	Feb.	.105	.125	.125	.028	2	
	March	.047	.125	.125	.024	3	
	April	.054	.125	.125	.022	4	
	May	.045	.125	.125	.020	5	
	June	.049	.125	.125	.019	6	
	Ozone						
142	Central Park						
	Blgs - Jan.	.042	.042	.145	.017	1	
	Feb.	.042	.042	.145	.016	2	
	March	.043	.043	.145	.016	3	
	April	.045	.045	.145	.017	4	
	May	.045	.045	.145	.018	5	
142	Lincoln School						
	Anac. - Jan.	.039	.039	.082	.023	1	
	Feb.	.049	.049	.082	.025	2	
	March	.049	.049	.082	.027	3	
	April	.023	.049	.082	.024	4	
	Hebgen Park						
	Butte - Jan.	.030	.050	.117	.008	1	
	Feb.	.055	.055	.117	.010	2	
	March	.099	.099	.117	.014	3	
	April	.075	.099	.117	.018	4	
	May	.083	.099	.117	.022	5	
	June	.032	.099	.117	.021	6	

Pollutant: Misc. Continuous Units PPM

AQCR	Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Sulfur Dioxide						
140	Central Park						
	Blgs. - Jan.	.375	.375	.375	.014	1	
	Feb.	.141	.375	.375	.013	2	
	March	.102	.375	.375	.011	3	
	April	.094	.375	.375	.011	4	
	May	.053	.375	.375	.010	5	
	Laurel Farm						
	Jan.	.415	.415	.660	.032	1	
	Feb.	.322	.415	.660	.034	2	
	March	.295	.415	.660	.030	3	
	April	.235	.415	.660	.026	4	
	May			**			
	June	.300	.415	.660	.023	5	
141	Kiwanis Park						
	Gt. Falls-Jan.	.012	.012	.070	.002	1	
	Feb.	.016	.016	.070	.002	2	
	Mar.	.026	.026	.070	.002	3	
142	Lincoln School						
	Anac. - Jan.	1.00	1.00	4.21	0.04	1	
	Feb.	0.65	1.00	4.21	0.04	2	
	March	0.61	1.00	4.21	0.03	3	
	April	1.72	1.72	4.21	0.04	4	
	May	1.15	1.72	4.21	0.05	5	
	June	1.51	1.72	4.21	0.05	6	

Pollutant: Misc. Continuous Units: PPM

AQCR	Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Sulfur Otoxide						
142	A & Mj East Helena						
	Jan.	.260	.260	.260	.011	1	
	Feb.	.090	.260	.260	.011	2	
	March	.115	.260	.260	.009	3	
	April	.200	.260	.260	.009	4	
	May	.032	.260	.260	.007	5	
	June	.065	.260	.260	.007	6	
143	Scobey Border						
	Daniels Co.-Jan	.009	.009	.009	.001	1	
	Feb	.011	.011	.011	.001	2	
	March	.006	.011	.011	.001	3	
	April	.004	.011	.011	.001	4	
	May	.008	.011	.011	.001	5	

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

Monthly Summary of Air Quality Data

JAN. - JUNE 1980

Pollutant: Sulfation Rate Units: $mgO_3/100$ sq. cm

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
140	Farm E. of Cenex						
	Laurel - Jan.	2,19	2,19	2,19	2,19	1	
	Feb.	1.58	2.19	2.19	1.89	2	
	Mar.	1.53	2.19	2.19	1.77	3	
	Apr.	0.81	2.19	2.19	1.53	4	
	May	0.90	2.19	2.19	1.40	5	
	June	0.68	2.19	2.19	1.28	6	
	W. Cenex-Laurel						
	Jan.	0.58	0.58	0.58	0,58	1	
	Feb.	0.30	0.58	0.58	0,44	2	
	Mar.	0.29	0.58	0.58	0.39	3	
	Apr.	0.17	0.58	0.58	0.34	4	
	May	0.28	0.58	0.58	0.32	5	
	June	0.27	0.58	0.58	0.32	6	
141	Stock Car Track						
	Gt.Falls-Jan.	0.564	0.564	0.564	0.564	1	
	Feb.	0.001	0.564	0.564	0.283	2	
	March	0.059	0.564	0.564	0.208	3	
	April	0.261	0.564	0.564	0.221	4	
	May	0.180	0.564	0.564	0.213	5	
	June	0.262	0.564	0.564	0.221	6	
	Phillips East						
	Gt. Falls - Jan.	0.477	0.477	1.200	0.477	1	
	Feb.	0.001	0.477	1.200	0.239	2	
	Mar.	1.063	1.063	1.200	0.514	3	
	Apr.	0.899	1.063	1.200	0.610	4	
	May	0.312	1.063	1.200	0.550	5	
	June	0.624	1.063	1.063	0.563	6	
	Phillips North #1						
	Gt. Falls - Jan.	0.049	0.049	0.590	0.049	1	
	Feb.	0.070	0.070	0.590	0.060	2	

Pollutant: Units:

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	March	0.001	0,070	0.590	0.040	3	
	April	0.186	0.186	0.590	0.077	4	
	May	0.174	0.186	0.590	0.096	5	
	June	0.624	0.624	0.624	0.184	6	
142	East Stack Sta.						
	E, Helena-Jan.	0.23	0.23	0.48	0.23	1	
	Feb.	0.38	0.38	0.48	0.31	2	
	March	0.41	0.41	0.48	0.34	3	
	April	0.23	0.41	0.48	0.31	4	
	May	0.13	0.41	0.48	0.28	5	
	June	0.22	0.41	0.48	0.27	6	
	Microwave-E.Helena						
	Jan.	0.35	0.35	0.56	0.35	1	
	Feb.	0.53	0.53	0.53	0.44	2	
	Mar.	0.16	0.53	0.53	0.35	3	
	April	0.18	0.53	0.53	0.31	4	
	May	0.17	0.53	0.53	0.28	5	
	June	0.20	0.53	0.53	0.27	6	
	212 E. Pacific						
	E.Helena-Jan.	0.26	0.26	0.45	0.26	1	
	Feb.	0.32	0.32	0.45	0.29	2	
	March	0.27	0.32	0.45	0.28	3	
	April	0.24	0.32	0.45	0.27	4	
	May	0.34	0.34	0.45	0.29	5	
	June	0.33	0.34	0.45	0.29	6	
	2580 Prickly Pear						
	E.Helena-Jan.	0.18	0.18	0.37	0.18	1	
	Feb.	0.27	0.27	0.37	0.23	2	
	March	0.15	0.27	0.37	0.20	3	
	April	0.24	0.27	0.37	0.21	4	
	May	0.27	0.27	0.37	0.22	5	
	June	0.26	0.27	0.37	0.23	6	

Pollutant: Miscellaneous Indicators Units

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Fluoride Papers	mg/sq	m/ 30 days				
144	Oehlbom Mt. box						
	Flathead Co.-Jan.	0.20	0.20	1.07	0.20	1	
	Feb.	0.41	0.41	1.07	0.31	2	
	Mar	0.32	0.41	1.07	0.31	3	
	Apr	0.29	0.41	1.07	0.31	4	
	May	0.38	0.41	0.97	0.32	5	
	June	0.31	0.41	0.97	0.32	6	
	Anac.South						
	Flathead - Jan.	1.23	1.23	11.42	1.23	1	
	Feb.	4.82	4.82	11.42	3.03	2	
	Mar.	1.84	4.82	11.42	2.63	3	
	Apr.	2.67	4.82	11.42	2.64	4	
	May	2.94	4.82	11.42	2.70	5	
	June	1.77	4.82	11.42	2.55	6	
	Glacier Park #1						
	Jan	0.69	0.69	0.69	0.69	1	
	Feb.	0.25	0.69	0.69	0.47	2	
	Mar.	0.23	0.69	0.69	0.39	3	
	Apr.	0.27	0.69	0.69	0.36	4	
	May	0.17	0.69	0.69	0.32	5	
	June	0.17	0.69	0.69	0.30	6	
	Glacier Park #9						
	Jan.	0.94	0.94	0.94	0.94	1	
	Feb.	0.20	0.94	0.94	0.57	2	
	Mar.	----------	---***	----------	----------		
	Apr.	0.15	0.94	0.94	0.43	3	
	May	0.15	0.94	0.94	0.36	4	
	June	0.15	0.94	0.94	0.32	5	

***Sample Void - no data

A & W East Helena							
	Jan.	0.29	0.29	0.29	0.29	1	
	Feb.	0.33	0.33	0.33	0.31	2	
A	Mar.	0.19	0.33	0.33	0.27	3	
	Apr.	0.20	0.33	0.33	0.25	4	
	May	----------	----------	---***	----------	----------	
	June	0.18	.033	0.33	.024	5	
	Fluoride Plates - mg/sq		m/30 days				
144	Anaconda, South						
	Flathead - Jan.	2.09	2.09	26.22	2.09	1	
	Feb.	7.24	7.24	26.22	4.67	2	
	Glacier Park #1						
	Jan.	0.17	0.17	0.47	0.17	1	
	Feb.	0.23	0.23	0.47	0.20	2	
	Glacier Park #9						
	Jan.	0.07	0.07	0.29	0.07	1	
	Feb.	0.49	0.49	0.29	0.28	2	
	Dustfall - tons/sq. mile						
	Mountain States						
141	Great Falls Jan.	34.29	34.29	34.29	34.29	1	
	Feb.	10,40	34.29	34.29	22.35	2	
	Mar.	40.91	40.91	40.91	28.53	3	
	Apr.	19.39	40.91	40.91	26.25	4	
	May	53.06	53.06	53.06	31.61	5	
	June	58.08	53.06	53.06	34.36	6	
	Fire Sta. #1						
	Gt. Falls Jan.	9.35	9.35	37.20	9.35	1	
	Feb.	8.74	9.35	37.20	9.35	2	
	Mar.	12.96	12.96	20.27	10.35	3	
	Apr	5.00	12.96	20.27	9.01	4	
	May	72.04	72.04	72.04	21.42	5	
	June	23.93	72.04	72.04	22.00	6	